

### COMMONWEALTH OF MASSACHUSETTS | PUBLIC EMPLOYEE RETIREMENT ADMINISTRATION COMMISSION

PHILIP Y. BROWN, ESQ., Chairman

JOHN W. PARSONS, ESQ., Executive Director

Auditor SUZANNE M. BUMP | KATHLEEN M. FALLON | KATE FITZPATRICK | JAMES M. MACHADO | ROBERT B. McCARTHY | JENNIFER F. SULLIVAN

### MEMORANDUM

TO: Andover Retirement Board

FROM: John W. Parsons, Esq., Executive Director

RE: Approval of Funding Schedule

DATE: October 9, 2020

This Commission is hereby furnishing you with approval of the revised funding schedule you recently adopted (copy enclosed). The schedule assumes payments are made on August 1 of each fiscal year. The schedule is effective in FY21 (since the amount under the prior schedule was maintained in FY21) and is acceptable under Chapter 32.

The revised schedule reflects a reduction in the investment return assumption from 7.0% to 6.25%.

If you have any questions, please contact PERAC's Actuary, John Boorack, at (617) 666-4446, extension 935.

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# Section 2: Actuarial Valuation Results

## **Funding schedule**

2023       4,310,696       9,807,154       14,117,850       187,340,004       8.359         2024       4,475,128       10,821,562       15,296,690       188,681,163       8.359         2025       4,645,810       11,928,154       16,573,964       189,033,767       8.359         2026       4,822,979       13,134,911       17,957,890       188,238,580       8.359         2027       5,006,882       14,450,492       19,457,374       186,117,976       8.359         2028       5,197,774       15,884,290       21,082,064       182,474,074       8.359         2029       5,395,918       17,446,499       22,842,417       177,086,694       8.359         2030       5,601,591       19,148,168       24,749,759       169,711,121       8.359         2031       5,815,077       21,001,286       26,816,363       160,075,662       8.359         2032       6,036,672       23,018,858       29,055,530       147,878,971       8.359         2033       6,266,683       25,214,983       31,481,666       132,787,119       8.359         2034       6,505,429       27,604,957       34,110,386       114,430,402       8.359         2035       6,753,241       30,	(1) Fiscal Year Ended June 30	(2) Employer Normal Cost	(3) Amortization of Remaining Unfunded Liability	(4) Actuarially Determined Contribution (ADC): (2) + (3)	(5) Total UAL	(6) Percent Increase in ADC Over Prior Year
2023         4,310,696         9,807,154         14,117,850         187,340,004         8.359           2024         - 4,475,128         10,821,562         15,296,690         188,681,163         8.359           2025         4,645,810         11,928,154         16,573,964         189,033,767         8.359           2026         4,822,979         13,134,911         17,957,890         188,238,580         8.359           2027         5,006,882         14,450,492         19,457,374         186,117,976         8.359           2028         5,197,774         15,884,290         21,082,064         182,474,074         8.359           2029         5,395,918         17,446,499         22,842,417         177,086,694         8.359           2030         5,601,591         19,148,168         24,749,759         169,711,121         8.359           2031         5,815,077         21,001,286         26,816,363         160,075,662         8.359           2032         6,036,672         23,018,858         29,055,530         147,878,971         8.359           2033         6,266,683         25,214,983         31,481,666         132,787,119         8.359           2034         6,505,429         27,604,957         34,110,38	2021	\$3,999,681	\$8,026,029	\$12,025,710	\$177,520,054	en e
2024       - 4,475,128       10,821,562       15,296,690       188,681,163       8.359         2025       4,645,810       11,928,154       16,573,964       189,033,767       8.359         2026       4,822,979       13,134,911       17,957,890       188,238,580       8.359         2027       5,006,882       14,450,492       19,457,374       186,117,976       8.359         2028       5,197,774       15,884,290       21,082,064       182,474,074       8.359         2029       5,395,918       17,446,499       22,842,417       177,086,694       8.359         2030       5,601,591       19,148,168       24,749,759       169,711,121       8.359         2031       5,815,077       21,001,286       26,816,363       160,075,662       8.359         2032       6,036,672       23,018,858       29,055,530       147,878,971       8.359         2033       6,266,683       25,214,983       31,481,666       132,787,119       8.359         2034       6,505,429       27,604,957       34,110,386       114,430,402       8.359         2035       6,753,241       30,205,362       36,958,603       92,399,840       8.359         2036       7,010,462       3	2022	4,152,288	8,877,569	13,029,857	185,152,836	8.35%
2025         4,645,810         11,928,154         16,573,964         189,033,767         8.359           2026         4,822,979         13,134,911         17,957,890         188,238,580         8.359           2027         5,006,882         14,450,492         19,457,374         186,117,976         8.359           2028         5,197,774         15,884,290         21,082,064         182,474,074         8.359           2029         5,395,918         17,446,499         22,842,417         177,086,694         8.359           2030         5,601,591         19,148,168         24,749,759         169,711,121         8.359           2031         5,815,077         21,001,286         26,816,363         160,075,662         8.359           2032         6,036,672         23,018,858         29,055,530         147,878,971         8.359           2033         6,266,683         25,214,983         31,481,666         132,787,119         8.359           2034         6,505,429         27,604,957         34,110,386         114,430,402         8.359           2035         6,753,241         30,205,362         36,958,603         92,399,840         8.359           2036         7,010,462         33,034,184         40,044,646<	2023	4,310,696	9,807,154	14,117,850	.187,340,004	8.35%
2026       4,822,979       13,134,911       17,957,890       188,238,580       8.359         2027       5,006,882       14,450,492       19,457,374       186,117,976       8.359         2028       5,197,774       15,884,290       21,082,064       182,474,074       8.359         2029       5,395,918       17,446,499       22,842,417       177,086,694       8.359         2030       5,601,591       19,148,168       24,749,759       169,711,121       8.359         2031       5,815,077       21,001,286       26,816,363       160,075,662       8.359         2032       6,036,672       23,018,858       29,055,530       147,878,971       8.359         2033       6,266,683       25,214,983       31,481,666       132,787,119       8.359         2034       6,505,429       27,604,957       34,110,386       114,430,402       8.359         2035       6,753,241       30,205,362       36,958,603       92,399,840       8.359         2036       7,010,462       33,034,184       40,044,646       66,243,361       8.359	2024	- 4,475,128	10,821,562	15,296,690	188,681,163	8.35%
2027       5,006,882       14,450,492       19,457,374       186,117,976       8.359         2028       5,197,774       15,884,290       21,082,064       182,474,074       8.359         2029       5,395,918       17,446,499       22,842,417       177,086,694       8.359         2030       5,601,591       19,148,168       24,749,759       169,711,121       8.359         2031       5,815,077       21,001,286       26,816,363       160,075,662       8.359         2032       6,036,672       23,018,858       29,055,530       147,878,971       8.359         2033       6,266,683       25,214,983       31,481,666       132,787,119       8.359         2034       6,505,429       27,604,957       34,110,386       114,430,402       8.359         2035       6,753,241       30,205,362       36,958,603       92,399,840       8.359         2036       7,010,462       33,034,184       40,044,646       66,243,361       8.359	2025	4,645,810	11,928,154	16,573,964	189,033,767	8.35%
2028         5,197,774         15,884,290         21,082,064         182,474,074         8.359           2029         5,395,918         17,446,499         22,842,417         177,086,694         8.359           2030         5,601,591         19,148,168         24,749,759         169,711,121         8.359           2031         5,815,077         21,001,286         26,816,363         160,075,662         8.359           2032         6,036,672         23,018,858         29,055,530         147,878,971         8.359           2033         6,266,683         25,214,983         31,481,666         132,787,119         8.359           2034         6,505,429         27,604,957         34,110,386         114,430,402         8.359           2035         6,753,241         30,205,362         36,958,603         92,399,840         8.359           2036         7,010,462         33,034,184         40,044,646         66,243,361         8.359	2026	4,822,979	13,134,911	17,957,890	188,238,580	8.35%
2029       5,395,918       17,446,499       22,842,417       177,086,694       8.359         2030       5,601,591       19,148,168       24,749,759       169,711,121       8.359         2031       5,815,077       21,001,286       26,816,363       160,075,662       8.359         2032       6,036,672       23,018,858       29,055,530       147,878,971       8.359         2033       6,266,683       25,214,983       31,481,666       132,787,119       8.359         2034       6,505,429       27,604,957       34,110,386       114,430,402       8.359         2035       6,753,241       30,205,362       36,958,603       92,399,840       8.359         2036       7,010,462       33,034,184       40,044,646       66,243,361       8.359	2027	5,006,882	14,450,492	19,457,374	186,117,976	8.35%
2030       5,601,591       19,148,168       24,749,759       169,711,121       8.359         2031       5,815,077       21,001,286       26,816,363       160,075,662       8.359         2032       6,036,672       23,018,858       29,055,530       147,878,971       8.359         2033       6,266,683       25,214,983       31,481,666       132,787,119       8.359         2034       6,505,429       27,604,957       34,110,386       114,430,402       8.359         2035       6,753,241       30,205,362       36,958,603       92,399,840       8.359         2036       7,010,462       33,034,184       40,044,646       66,243,361       8.359	2028	5,197,774	15,884,290	21,082,064	182,474,074	8.35%
2031       5,815,077       21,001,286       26,816,363       160,075,662       8.359         2032       6,036,672       23,018,858       29,055,530       147,878,971       8.359         2033       6,266,683       25,214,983       31,481,666       132,787,119       8.359         2034       6,505,429       27,604,957       34,110,386       114,430,402       8.359         2035       6,753,241       30,205,362       36,958,603       92,399,840       8.359         2036       7,010,462       33,034,184       40,044,646       66,243,361       8.359	2029	5,395,918	17,446,499	22,842,417	177,086,694	8.35%
2032       6,036,672       23,018,858       29,055,530       147,878,971       8.359         2033       6,266,683       25,214,983       31,481,666       132,787,119       8.359         2034       6,505,429       27,604,957       34,110,386       114,430,402       8.359         2035       6,753,241       30,205,362       36,958,603       92,399,840       8.359         2036       7,010,462       33,034,184       40,044,646       66,243,361       8.359	2030	5,601,591	19,148,168	24,749,759	169,711,121	8.35%
2033       6,266,683       25,214,983       31,481,666       132,787,119       8.359         2034       6,505,429       27,604,957       34,110,386       114,430,402       8.359         2035       6,753,241       30,205,362       36,958,603       92,399,840       8.359         2036       7,010,462       33,034,184       40,044,646       66,243,361       8.359	2031	5,815,077	21,001,286	26,816,363	160,075,662	8.35%
2034       6,505,429       27,604,957       34,110,386       114,430,402       8.359         2035       6,753,241       30,205,362       36,958,603       92,399,840       8.359         2036       7,010,462       33,034,184       40,044,646       66,243,361       8.359	2032	6,036,672	23,018,858	29,055,530	147,878,971	8.35%
2035     6,753,241     30,205,362     36,958,603     92,399,840     8.35%       2036     7,010,462     33,034,184     40,044,646     66,243,361     8.35%	2033	6,266,683	25,214,983	31,481,666	132,787,119	8.35%
2036 7,010,462 33,034,184 40,044,646 66,243,361 8.359	2034	6,505,429	27,604,957	34,110,386	114,430,402	8.35%
	2035	6,753,241	30,205,362	36,958,603	92,399,840	8.35%
2037 7,277,448 35,641,231 42,918,679 35,461,624 7.189	2036	7,010,462	33,034,184	40,044,646	66,243,361	8.35%
	2037	.7,277,448	35,641,231	42,918,679	35,461,624	7.18%
2038 7,554,568 0 7,554,568 0 -82.40%	2038	7,554,568	. 0	7,554,568	. 0	-82.40%

#### Notes:

Actuarially Determined Contributions are assumed to be paid on August 1.

Actuarially Determined Contribution for fiscal year 2021 is set equal to the budgeted amount determined with the prior valuation.

Item (2) reflects 3.5% growth in payroll as well as a 0.15% adjustment to total normal cost to reflect the effects of mortality improvement due to generational mortality assumption.

Projected normal cost does not reflect the future impact of pension reform for future hires.

Projected unfunded actuarial accrued liability reflects deferred investment gains.

Investment return for 2020 assumed to be 0.0%.